

ABSTRACT OF THE DISCLOSURE

A new composition of matter includes $^{195\text{m}}\text{Pt}$ characterized by a specific activity of at least 30 mCi/mg Pt, generally made by method that includes the steps of: exposing ^{193}Ir to a flux of neutrons sufficient to convert a portion of the ^{193}Ir to $^{195\text{m}}\text{Pt}$ to form an irradiated material; dissolving the irradiated material to form an intermediate solution comprising Ir and Pt; and separating the Pt from the Ir by cation exchange chromatography to produce $^{195\text{m}}\text{Pt}$.